



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,690	10/12/2004	Tetsuro Fukumoto	259741US6PCT	6697

22850 7590 06/16/2008  
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
----------

CUTLER, ALBERT H

ART UNIT	PAPER NUMBER
----------	--------------

2622

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

06/16/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/509,690	<b>Applicant(s)</b> FUKUMOTO ET AL.	
	<b>Examiner</b> ALBERT H. CUTLER	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5 and 7-14 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is responsive to communication filed on February 26, 2008. Claims 1-14 are pending in the application and have been examined by the Examiner.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2007 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 2622

2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1-2, 5, 9, 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haraguchi et al. (US 5,077,567) in view of Maeno et al. (US 4,666,274).

Consider claim 1, Haraguchi et al. teaches:

A lens adapter (waterproof lens cover, 40, figures 1 and 2) to be mounted on a collapsible lens-type camera (zoom lens camera, 10) with a lens barrel (lens barrel, 18) moving between a projection position projected to a front of a case (body, 12) and a housing position housed within the case (see column 2, lines 30-53), the lens adapter (40) comprising:

an attachment section (negative screw portion, 43) configured to be mounted on the case (12) in a detachable manner (See column 3, lines 8-18. The negative screw portion (43) is connected to a positive screw portion (17) of the camera case (12) in order to bring the camera and lens adapter into engagement with each other.); and

a lens barrel housing section (40) provided at the attachment section (43) and configured to house the lens barrel (18), the lens barrel housing section (40) includes a cylindrical wall section (cylindrical portion, 41) covering the lens barrel (18) and an opening provided at a front end of the cylindrical wall section (41) so as to expose a front end of the lens barrel (See figure 2. The lens adapter (40) includes a cylindrical wall section (41) which houses the lens barrel (18), and comprises an opening at the

front end which contains a transparent plate (42). See column 3, line 4 through column 4, line 5.), the cylindrical wall section (41) has an internal diameter and length such that the lens barrel positioned at the projection position is covered (See figure 2, column 3, lines 38-40.), a female screw (negative screw portion, 47) configured to attach optical components (42) is formed at the opening (See figure 2, column 3, lines 19-27.), the attachment section (43) together with the lens barrel housing section (40) are configured to partially expose the case (12) when mounted on the case (See figures 1 and 2. The attachment section (43) and lens barrel housing section (40) only cover a small portion of the camera case (12).);

Haraguchi et al. further teaches that bayonet coupling can be used to mount the lens cover (40) to the camera case (12, column 4, lines 16-19). However, Haraguchi et al. does not explicitly teach that the attachment section includes a first member and a second member swingably engaging each other in a detachable manner.

Maeno et al. similarly teaches attaching a lens adapter (figure 2) to a camera case (1, see figure 3). Maeno et al. teaches attaching a zoom lens to the front of the camera case using bayonet coupling (column 2, lines 36-38). However, Maeno et al. does not teach a collapsible lens.

In addition to the teachings of Haraguchi et al., Maeno et al. teaches an attachment section (figure 2) which includes a first member (support frame, 11) and a second member (expandable belt, 19, and lock member, 20) swingably engaging each other in a detachable manner (See figure 3, column 2, line 65 through column 3, line 28.).

Haraguchi et al. teaches a collapsible lens barrel (18), and thus would have no need to attach a zoom lens as taught by Maeno et al. However, Haraguchi et al. teaches using bayonet coupling to attach the lens adapter (40), and could use the bayonet coupling taught by Maeno et al. to attach a lens adapter (40) to the front of the attachment section (figure 2) of Maeno et al.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to include the attachment section taught by Maeno et al. as part of the lens adapter taught by Haraguchi et al. for the benefit of protecting important portions of the camera against damages (Maeno et al., column 3, lines 34-35, column 3, lines 47 through column 4, line 6).

Consider claim 2, and as applied to claim 1 above, Haraguchi et al. does not explicitly teach first and second members.

However, Maeno et al. teaches the first member (11) having a front wall that comes into contact with a portion of a front surface of the case nearer the lens barrel (See figure 3. The front part of the camera case contacts the front of the first member (11).), and the second member (19, 20) having a rear wall that comes into contact with a rear surface of the case (See figure 3. The second member (19, 20) forms a rear wall, enclosing the camera (1).); the first member (11) and the second member (19, 20) connect in a state that the case is sandwiched with the front wall and the rear wall in a direction from front to rear (See figures 2 and 3, column 3, lines 12-28. The second

member (19, 20) surrounds the rear of the camera, and attaches at a top portion thereof with the first member (11).); and

the lens barrel housing section is provided on the first member (Maeno teaches an open section (12) for bayonet coupling on the front of the first member (11). See figure 1, column 2, lines 36-38.).

Consider claim 5, and as applied to claim 2 above, Haraguchi et al. does not explicitly teach first and second members.

However, Maeno et al. teaches the first member (11) and the second member (19, 20) have a side wall respectively which comes into contact with a side surface of the case (See figure 3. The first member (11), and second member (19, 20) attach at a bottom side of the camera (1), forming a wall which contacts the bottom side surface of the camera case.).

Consider claim 9, and as applied to claim 1 above, Haraguchi et al. teaches that the lens barrel housing section (40) is made of a material having rigidity (See figures 1 and 2. In order for the housing section (40) to be able to screw onto the camera case (12), it must be made of a rigid material.).

Maeno et al. teaches that the attachment section is made from a synthetic resin having rigidity (The attachment section is made from a material such as rubber (column 2, lines 23-30) which is rigid enough to enable the clamping of the attachment section to the camera body, column 3, lines 2-12.).

Consider claim 11, and as applied to claim 1 above, Haraguchi et al. teaches that the lens barrel housing section (40) is formed of a material that blocks out light (See figure 2. The transparent plate (42) on the front of lens barrel housing (40) allows light rays to pass, while the cylindrical portion (41) blocks light out. See column 3, lines 38-45.).

Consider claim 13, and as applied to claim 1 above, Haraguchi et al. does not explicitly teach a tripod attachment.

Maeno et al. teaches that a female screw (15) for tripod attachment is provided at a portion that the attachment section faces a lower surface of the case (see figure 3, column 2, lines 40-41).

Consider claim 14, and as applied to claim 1 above, both Haraguchi et al. and Maeno et al. teach that various switches, in use for photographing are provided and the switches are located at the outer side of the attachment section and exposed outside in a state when the attachment section is attached on the case (See figure 1 of Haraguchi et al. and figure 1 of Maeno et al.).

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haraguchi et al. (US 5,077,567) in view of Maeno et al. (US 4,666,274) as applied to claim 1 above, and further in view of Maitani et al. (US 4,273,434).



Consider claim 7, and as applied to claim 1 above, Haraguchi et al. teaches of a finder with optics separate from the lens barrel (24, figure 1, column 2, lines 54-60).

However, Haraguchi et al. and Maeno et al. do not explicitly teach that the finder apparatus has an opening and closing member for opening and closing the eyepiece window at a portion where the attachment section faces the eyepiece window.

Maitani discloses a sliding cover for a camera that opens and closes the eyepiece window (column 2, lines 14-17).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to add the sliding member opening and closing the eyepiece to the finder apparatus of Haraguchi et al. and Maeno et al. for the benefit of protecting the finder window without the necessity of enlarging the camera body, and enabling the finder window to be opened or closed by an easy operation (Maitani, column 1, lines 32-37).

Consider claim 8, and as applied to claim 1 above, Haraguchi et al. teaches of a finder with optics separate from the lens barrel (24, figure 1, column 2, lines 54-60).

However, Haraguchi et al. and Maeno et al. do not explicitly teach that the finder lens is provided with opening and closing member for opening and closing the finder lens at a portion where the attachment section faces the finder lens.

Maitani discloses a sliding cover for a camera that opens and closes the eyepiece window (column 2, lines 14-17).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to add the sliding member opening and closing the eyepiece to the finder apparatus at a portion where the attachment section faces the finder lens of Haraguchi et al. and Maeno et al. for the benefit of protecting the finder window without the necessity of enlarging the camera body, and enabling the finder window to be opened or closed by an easy operation (Maitani, column 1, lines 32-37).

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haraguchi et al. (US 5,077,567) in view of Maeno et al. (US 4,666,274) as applied to claim 1 above, and further in view of Kropatsch (US 4,770,426).

Consider claim 10, and as applied to claim 1 above, Haraguchi et al. teaches that the lens barrel housing section (40) is made of a material having rigidity (See figures 1 and 2. In order for the housing section (40) to be able to screw onto the camera case (12), it must be made of a rigid material.). Haraguchi et al. further teaches that a ring (O-ring, 49) is embedded and fixed at a front end of the cylindrical wall section (41, see figure 2), that the opening (42) is formed on an inside of an inner peripheral surface of the ring (49, see figure 2), and the female screw (47) is formed on an inner peripheral surface of the ring (See figure 2, column 3, lines 22-27.).

Maeno et al. teaches that the attachment section is made from a synthetic resin having rigidity (The attachment section is made from a material such as rubber (column

2, lines 23-30) which is rigid enough to enable the clamping of the attachment section to the camera body, column 3, lines 2-12.).

However, the combination of Haraguchi et al. and Maeno et al. does not explicitly teach that the O-ring is metallic.

Kropatsch teaches of using a metallic O-ring (column 1, lines 51-57, column 2, lines 16-24).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use a metallic O-ring as taught by Kropatsch as the O-ring taught by Haraguchi et al. and Maeno et al. for the benefit of increasing safety and preventing corrosion (Kropatsch, column 1, lines 9-14).

Even if they are not within the same field of endeavor, the Examiner finds that the references are reasonably pertinent to the problem with which the applicant was involved, namely, sealing a camera/attachment combination, and would have commended themselves to anyone addressing such a problem. See In re Clay, 966 F.2d 656, 658, USPQ2d 1058, 1060 (Fed. Cir. 1992).

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haraguchi et al. (US 5,077,567) in view of Maeno et al. (US 4,666,274) as applied to claim 1 above, and further in view of Akira (JP 02-201340).

Consider claim 12, and as applied to claim 1 above, Haraguchi et al. does not explicitly teach a tripod attachment.

Maeno et al. teaches that a female screw (15) for tripod attachment is formed in the attachment section (see figure 3, column 2, lines 40-41).

However, Haraguchi et al. and Maeno et al. do not disclose the a female screw for tripod attachment is formed in the case, a screw insertion hole is formed at a portion of the attachment section facing the female screw for tripod attachment in a state that the attachment section is attached to the case, and the lens adapter is configured in such a way that the attachment section is fixed on the case by screwing an attachment screw into the female screw for tripod attachment via the screw insertion hole.

Akira discloses an attachment for a camera with a screw insertion hole formed at a portion of the attachment section facing the female screw, and that the attachment is fixed on the case by screwing an attachment screw into the female screw via the screw insertion hole (figure 1).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to include the screw insertion hole of Akira in the lens adapter of Haraguchi et al. and Maeno et al. for the benefit of allowing for the camera to be mounted on a tripod while still protecting the lens barrel from damage.

### ***Allowable Subject Matter***

10. Claims 3, 4 and 6 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Reasons for indicating allowable subject matter were stated in the previous Office Action, dated March 27, 2007.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALBERT H. CUTLER whose telephone number is (571)270-1460. The examiner can normally be reached on Mon-Thu (9:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc-Yen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AC  
06/05/2008

***/Ngoc-Yen T. VU/  
Supervisory Patent Examiner, Art Unit 2622***

